East German enterprises' profitability and financing in 1995

The following study is a further contribution to the series of analyses of the profitability and financing of east German enterprises which have been carried out annually since 1993. It is based on the annual accounts of around 3,250 firms in the manufacturing, construction and distribution sectors for 1994 and 1995. Although the study thus covers only part of the east German economy, the three sectors involved have been at the heart of the economic restructuring efforts in the new Länder. The firms included in the sample were still in the red in 1995 on balance; their losses contracted appreciably, however, compared with 1994. Furthermore, the wide gap that existed in previous years between construction and distribution, on the one hand (i.e. those sectors that recovered fairly rapidly after German unification), and manufacturing, on the other hand, has narrowed considerably. The ratio of own funds to the balance sheet total a key indicator for assessing the soundness of operational financing - also rose further in industry, whereas it declined in the other two sectors, not least owing to the deterioration in earnings.

Macroeconomic background

Following the strong growth momentum in the first few years after unification, the east German economy entered a new phase in the Weaker growth

transformation process in 1995. At 5½%, real GDP expanded only about half as much as in 1994, while last year the increase in output slowed further to 2%. It is no longer possible to analyse the deceleration in growth in detail as the previous separate treatment for western and eastern Germany in the national accounts was curtailed from the beginning of 1995. But there are many indications that economic momentum in eastern Germany has weakened accross a broad front. This was caused both by pan-German developments and by specifically east German factors.

Retarding influences

The substantial appreciation of the Deutsche Mark in the foreign exchange markets had a pronounced retarding effect on German exports in 1995. Although the direct export activity of east German industrial enterprises was relatively low, they nevertheless suffered indirectly in their function of suppliers to west German export firms. The slowdown in economic growth was also caused in part by the considerable wage increases in the 1995 pay round. A further factor was that, following the wave of new corporate set-ups and the massive expansion of economic assistance measures, a certain return to a more normal situation was to be expected anyway in parts of the east German economy.

Sectoral developments

In the wake of the more difficult cyclical setting, domestic wage cost pressures and the slight tailing-off of government promotional measures, the manufacturing sector in eastern Germany had to dampen the pace of expansion in 1995. Real gross value added, which had grown by $15\frac{1}{2}\%$ in 1994, went up by "only" $6\frac{1}{2}\%$ in 1995. In the construc-

tion industry the forces of growth weakened even more starkly: economic output expanded by 81/2%, whereas it had grown by one-quarter in the year before. This owed much to the fact that in 1995 the public sector for the first time slightly reduced its previously steeply raised budget for construction investment in the new Länder, after many of the most pressing infrastructural bottlenecks had been overcome and various projects had reached a fairly advanced stage of development. In addition, the propensity of the central, regional and local authorities to incur debt was probably no longer as pronounced, following their high level of borrowing in the preceding years.

The investment activity of enterprises in the new Länder likewise decelerated; however, per capita spending on machinery, equipment and buildings was presumably still at a comparatively very high level. A mainstay of building activity was residential construction, in which 16% more resources were invested than in 1994 in price-adjusted terms. The overall demand for construction work showed a marked downturn, however, in the course of 1995. Real gross value added in the distribution sector rose by 3 % in the period under review, which was only a little less than in 1994. The course of economic development in this sector normalised very quickly following the sharp upswing immediately after reunification.

Structural features of the range of east German enterprises included in the analysis

Scope of the sample

The following study is based on the balance sheet data of around 3,250 east German enterprises – of which roughly 2,700 included details of the number of employees – in the manufacturing, construction and distribution sectors. These firms submitted their balance sheets and profit and loss accounts for both 1994 and 1995 to the Bundesbank by mid-June of this year in the context of rediscount business. The data material was far more comprehensive than in previous years. ¹

Time span

The period covered by this analysis embraces two years, whereas the study published last year for 1994 had been based for the first time on a three-year sample. The main reason for choosing a two-year time span was that in 1994 the Treuhand agency remitted the debt of several sizeable enterprises, especially in the manufacturing sector, in the context of privatisation. This led to a sharp rise in these firms' own funds ratio and noticeably improved their earnings result. Such special influences, which were commented on in detail in earlier studies, 2 also had a bearing in 1995 in the context of the privatisation measures of the successor organisations of the Treuhand agency, but they were less pronounced than in 1994 when the Treuhand agency had faced a series of particularly difficult privatisation cases. It is not possible to analyse these transactions in detail because the data material submitted to the branch offices of the Bundesbank usually gives no indication of the ownership pattern. Quite apart from that, the Treuhand enterprises were an integral component of the east German economy, and so their inclusion in the earlier analyses seemed fundamentally warranted.

The new sample comprises just short of 1,200 enterprises in the manufacturing sector, 530 firms in construction and 1,530 in distribution. The sectoral composition differs from that of the sample analysed in 1996 in that construction is more strongly represented than before, with a weighting of 16 1/2 %, whereas manufacturing (36 1/2 %) and distribution (47 %) are a little less prominent. On average, manufacturing firms generated a turnover of DM 28 million. Compared with the situation in western Germany, they not only had a noticeably smaller plant size but also a smaller turnover per employee. The latter fact is presumably due mainly to the wide gap in productivity that still exists. In construction and distribution these differences in size between western and eastern Germany were even more pronounced.3

Breakdown by economic sector

¹ The studies published in 1993 and 1994 were based on approximately 850 and 1,460 annual accounts, respectively; the analysis in 1995 drew on 2,400 and that in 1996 (which covered a three-year sample) on not quite 2,000 balance sheets and profit and loss accounts.

² See most recently: Deutsche Bundesbank, East German enterprises' profitability and financing in 1994, Monthly Report, July 1996, page 45 ff.

³ In both the old and the new Länder, the representation of larger enterprises in the corporate balance sheet statistics exceeds their significance in the enterprise sector as a whole. These structural distortions can be largely eliminated for western Germany by expanding the individual items in the balance sheet and profit and loss account by industry/turnover size category on the basis of the turnover tax statistics. This cannot be done for the new Länder at the moment as the population in the industries concerned is too small.

Representativeness of the data The question of the representativeness of the data is integral to interpreting the figures. It should be pointed out in this context that the balance sheet material solely covers enterprises in the three aforementioned sectors which, in addition, meet the standards of creditworthiness required from firms participating in the Bundesbank's rediscount business. Consequently, enterprises which are in a very difficult position are fairly poorly represented. This appears to be confirmed at first sight by the fact that, according to the results of the Federal Statistical Office's cost structure statistics on east German manufacturing and mining enterprises (which was based on a survey of the 5,400 firms with 20 or more employees), the profitability of these east German firms in 1994 was markedly worse than the picture given here for the reference period.

Firstly, however, it should be remembered that the mining industry - which is included in the official statistics and which is deeply in the red - depresses the overall result. Secondly, the cost structure survey is not representative to the extent that it does not encompass smaller enterprises with fewer than 20 employees. Yet one-quarter of the manufacturing firms covered by the Bundesbank's corporate balance sheet statistics come into this category. According to the Bundesbank's evaluations, the earnings situation of smaller enterprises in the survey year 1994 was decidedly more favourable than that of larger firms. It can generally be said that the data of the corporate balance sheet statistics more accurately reflect profitability and financing in manufacturing and in distribution than in the construction sector.

Annual results

Although the 3,250 east German firms analysed still ran up losses on balance in 1995, they came guite close to breaking even. Before taxes on income and before transfers, they had a combined deficit for the year of DM 0.5 billion, or just under 1% of turnover.4 In 1994 the aggregate loss had been almost DM 1.5 billion, or 21/2% of turnover. Since 1992, when the profit-turnover ratio (i.e. the profit or loss for the year as a percentage of turnover) had amounted to $-8\frac{1}{2}$ %, east German firms have thus come perceptibly closer to breaking even. Comparisons with the profitability ratio of former samples (which did not have a homogeneous composition) appear acceptable if - as in this case the two ratios were almost completely identical for the overlapping year 1994 and thus dovetail neatly into one another.

Nevertheless, there is still a considerable gap between east German firms and their west German counterparts, which in 1995 achieved a profit-turnover ratio before taxes on income of 2 ½ % – although even that was not large by international standards. These differences also become apparent if the respective share of loss-making enter-

Further sharp reduction in losses

Profitability differential vis-à-vis western Germany

⁴ Although the deficit for the year before taxes on income and before transfers in 1995 was identical to the figure after transfers, the reduction in losses compared with 1994 was one-third higher because in that year losses were offset within the consolidated group in many

Memo item West Germany;

Selected ratios from the annual accounts of east German enterprises *

| | | | | | | | | | all |
|--|---|-------------|----------------|----------------|-----------|-------|------------|-------|----------|
| | | | | | | | | | enter- |
| | All enterp | rises 1 | Manufact | uring | Construct | ion | Distributi | on 2 | prises 3 |
| Item | 1994 | 1995 | 1994 | 1995 | 1994 | 1995 | 1994 | 1995 | 1995 |
| Balance sheet ratios | % of bala | nce sheet t | otal 4 | | | | | | |
| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | | | |
| Assets | | | | | | | | | |
| Tangible fixed assets 5 | 41.6 | 40.6 | 47.2 | l 45.4 | ■ 24.0 | 25.3 | 35.2 | 34.1 | l 25 |
| Stocks | 17.6 | 17.9 | 13.3 | 14.1 | 16.2 | 15.0 | 30.4 | 30.7 | 20 |
| Cash 6 | 8.5 | 9.3 | 10.1 | 11.6 | 8.0 | 7.1 | 4.2 | 3.7 | 5 |
| Debtors | 29.2 | 28.8 | 25.5 | 24.7 | 49.8 | 50.7 | 28.9 | 30.0 | 35 |
| Short-term | 28.4 | 28.0 | 24.4 | 23.8 | 49.3 | 50.0 | 28.2 | 29.4 | 33 |
| Long-term | 0.9 | 0.8 | 1.0 | 0.9 | 0.5 | 0.7 | 0.6 | 0.6 | 2.5 |
| Investments | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.1 | 0.1 | 3 |
| Participating interests | 2.2 | 2.5 | 3.0 | 3.3 | 0.6 | 0.5 | 0.8 | 0.9 | 11 |
| Liabilities | | | | | | | | | |
| Own funds 4, 7 | 22.4 | 24.0 | 26.7 | 29.4 | 8.0 | 7.5 | 17.8 | 16.0 | 18 |
| Creditors | 65.4 | 65.5 | 58.2 | 58.2 | 82.7 | 83.3 | 76.6 | 78.3 | 59.5 |
| Short-term | 45.2 | 42.8 | 37.1 | 34.2 | 69.9 | 68.1 | 55.0 | 55.9 | 44.5 |
| Long-term | 20.2 | 22.7 | 21.1 | 24.0 | 12.8 | 15.2 | 21.6 | 22.3 | 15 |
| Provisions 7 | 12.1 | 10.5 | 15.0 | 12.3 | 9.3 | 9.2 | 5.5 | 5.7 | 22 |
| Profit and loss account | | | | | | | | | |
| ratios | % of total | output | | | | | | | |
| | | | | | | | | | |
| Cost of materials 8 | 67.8 | 68.1 | 62.8 | 62.9 | 55.8 | 56.4 | 78.5 | 78.9 | 62.5 |
| Labour cost 9 | 18.4 | 17.9 | 22.2 | 21.0 | 29.8 | 30.2 | 9.7 | 9.8 | 19 |
| Depreciation | 7.4 | 6.4 | 10.2 | 8.4 | 6.2 | 6.0 | 4.2 | 3.7 | 4 |
| Interest paid | 2.3 | 2.1 | 2.8 | 2.4 | 1.7 | 1.9 | 1.8 | 1.8 | 1.5 |
| Taxes | 0.6 | 0.5 | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 3 |
| Other cost | 14.7 | 14.5 | 20.3 | 19.3 | 11.8 | 12.0 | 8.4 | 8.8 | 13.5 |
| Gross income | 32.2 | 31.9 | 37.2 | 37.1 | 44.2 | 43.6 | 21.5 | 21.1 | 37.5 |
| Interest paid (net) 10 | 1.7 | 1.6 | 2.0 | 1.6 | 1.3 | 1.5 | 1.5 | 1.5 | 1 |
| | % of turn | over | | | | | | | |
| Donafit for the consu | 2.1 | | | | | | | | |
| Profit for the year Profit for the year before | - 2.4 | - 1.1 | - 5.0 | - 1.6 | - 0.2 | - 1.0 | 0.1 | - 0.3 | 1.5 |
| taxes on income 11 | - 2.1 | - 0.8 | - 4.7 | – 1.5 | 0.1 | - 0.7 | 0.5 | 0.0 | 2.5 |
| Do. before transfers | - 2.1 | -0.8 | - 4.7 - 5.7 | - 1.5 - 1.5 | 0.1 | | 0.5 | | 2.5 |
| Do. Deloie transiers | - 2.0 | - 0.0 | - 5.7 | - 1.3 | . 0.5 | - 0.5 | 0.5 | . 0.1 | . 2.3 |

^{*} Results of a two-year cylindered sample of 3,251 manufacturing, construction and distribution enterprises. — 1 Consolidated results. — 2 Retail trade, wholesale trade and intermediaries. — 3 Results of the estimate for the November 1996 Monthly Report, rounded to the nearest half or full percentage point. — 4 Less adjustments to capital accounts. — 5 Including intangible assets. — 6 Notes and coins and bank balances. — 7 Including pro

rata share of special reserves — 8 Including expenditure on goods and services purchased. — 9 Wages, salaries, social security contributions and voluntary social security expenditure. — 10 Balance of interest paid and interest received. — 11 Taxes on income and earnings; in the case of partnerships and sole proprietorships trade earnings tax only.

Deutsche Bundesbank

prises is compared in each case with the total number of firms included in the study. Thus in 1995 four-tenths of the enterprises in the new Länder encompassed in the balance sheet statistics were in the red, compared with not quite one-quarter in the old Länder.

Diverging trends in the individual economic sectors Of the enterprises included in the sample, only those in the manufacturing sector managed to improve their earnings position. Overall, they were able to reduce their aggregate loss vis-à-vis 1994 by 60 %, mainly on account of the expansion of business activity which, despite a deceleration, was still considerable in 1995; the "negative profitturnover ratio" improved correspondingly by 4 percentage points to $-1\frac{1}{2}$ %. In 1992 the loss ratio had stood as high as 191/2% of turnover. By contrast, the construction firms included in the study slipped back below the break-even level in 1995 after having transcended it in the previous year for the first time since unification; their average profitturnover ratio fell in the financial year to -1%. This was due in general to the slackening of construction activity, which had a particularly heavy impact on the firms included in the selection. Before taxes on income, the distribution firms included in the study lost their previous modest surpluses on balance in 1995, and the after-tax statistical aggregate of these firms even showed a deficit once again. This deterioration in earnings was actually accompanied by a quite sharp expansion of business activity.

Statistical dispersion by sector...

The profit-turnover ratios of the firms analysed were in 1994-5 once again dispersed very widely around the averages. The bottom

quartile of enterprises (comprising well over 800 firms in the multisectoral cross-section), ranked by profit-turnover ratio, showed losses amounting to 13% of turnover, whereas the profitable firms grouped in the top quartile generated earnings equal to 8 % of turnover; the profit-turnover ratios in the remaining two quartiles were just below and just above the break-even point, respectively. Manufacturing firms showed a wider dispersion than enterprises as a whole, with their profit-turnover ratio ranging from -23 % in the bottom quartile to 10 1/2 % in the top quartile. In the construction and distribution sectors the spread was much narrower, with the respective negative and positive profitturnover ratios all being single-digit figures.

If the data are classified by size category, it immediately becomes evident that in the bottom quartile the large enterprises were able to reduce their losses appreciably (once again in terms of the profit-turnover ratio) by 6 ½ percentage points to $-17\frac{1}{2}$ %. They thus came closer to the earnings level of small and medium-sized firms which, starting from a somewhat better situation, did not make as much progress. At the top end of the table the large enterprises took over the "profit lead" in 1995. One remarkable feature is that the average profit-turnover ratios in all three size categories in 1995 showed only a small divergence of barely ½ percentage point. 5 By comparison, last year's study showed a cor-

... and by size category

⁵ In making this comparison, however, it should be remembered that most small firms and a section of the medium-sized firms are run as unincorporated enterprises, with the result that the entrepreneurs' remuneration forms part of the profit for the year, whereas the remuneration of the board members of incorporated enterprises is included in labour cost.

Profit-turnover ratio by quartile *

%

| Quartile(s) | All enter- prises | Manu- facturing | Con- struction | Distri- bution |
|-------------------------|----------------------|--------------------|-------------------|--------------------|
| Lowest | | | | |
| 1994 | - 14.8 | - 28.0 | - 6.3 | - 3.6 |
| 1995 | - 13.1 | - 22.8 | - 9.2 | - 4.4 |
| 25 % to less than 50 % | | | | |
| 1994 1995 | - 0.2 | - 2.3 - 1.2 | 0.3 | 0.2 |
| 1993 | - 0.5 | - 1.2 | 0.0 | 0.0 |
| 50 % to less than 75 % | 4.2 | 0.5 | 4.0 | |
| 1994 1995 | 1.2 | 0.6 1.4 | 1.8 1.3 | 1.3 0.9 |
| 1555 | | 1.4 | 1.5 | 0.5 |
| Highest | 7.6 | 8.7 | 11.5 | 5.0 |
| 1994 1995 | 8.1 | 10.7 | 6.4 | 4.3 |
| | | | | |
| All 1994 | - 2.6 | - 5.7 | 0.3 | 0.5 |
| 1995 | - 0.8 | - 1.5 | - 0.9 | 0.1 |
| | | Enterprise | | |
| | | turnover | of | |
| | | | DM 5 million | |
| | | less | to less | |
| | | than | than | DM 50 |
| | All enter- prises | DM 5 million | DM 50 million | million or more |
| | prises | IIIIIIOII | IIIIIIOII | of more |
| Lowest | | | | |
| 1994 | - 14.8 | - 14.8 | - 13.7 | - 24.0 |
| 1995 | - 13.1 | - 13.4 | - 10.8 | - 17.6 |
| 25 % to less than 50 % | | | | |
| 1994 | - 0.2 | - 0.2 | - 0.1 | - 1.9 |
| 1995 | - 0.3 | - 0.3 | - 0.2 | - 0.7 |
| | | | | |
| | | | | |
| 1994 | 1.2 | 1.6 | 1.1 | 0.5 |
| | 1.2 1.1 | 1.6 1.4 | 1.1 0.9 | 0.5 1.0 |
| 1994 1995 Highest | 1.1 | 1.4 | 0.9 | 1.0 |
| | | | | |

- 2.6

0.8

- 1.3

1.0

- 4.0

- 0.5

1.1

Deutsche Bundesbank

ΑII

1994

1995

responding spread for 1992, for example, from -3% to $-11\frac{1}{2}\%$. This means that large firms have obviously made up ground thanks to their restructuring efforts. Finally, the dispersion of profit-turnover ratios was influenced more by the sectoral component than by corporate size – as was the case in 1994, too.

Income and cost

The marked reduction in losses of the firms included in the study for the 1995 financial year was due mainly to a sharp growth of 12% in total output (turnover plus change in stocks of own products and other capitalised production). Total income, which also includes interest received and other income, expanded by the same margin.

Course of business in general...

In contrast to 1994 (and also to 1993), when the course of business of all three economic sectors had been more or less symmetrical, the expansion in 1995 was fuelled almost exclusively by the manufacturing sector (+17%)and the distribution sector (+ 10 ½ %), whereas the turnover of the construction industry grew by only 2 % and total output actually fell a little short of the previous year's level owing to the decreasing stock of unfinished buildings. The weak course of business in the construction industry is somewhat at odds with the finding of the Federal Statistical Office, which recorded a turnover growth of 6 1/2 % for the construction sector in eastern Germany in 1995. The firms included in our study apparently did not participate fully in this expansionary process. The sharp growth of turnover in distribution

... and in the individual economic sectors

^{*} Average values per quartile. To determine the quartile categories enterprises were sorted separately by profit-turnover ratio for each year per sector and per size category. The profit-turnover ratio is the profit for the year before taxes on income and before transfers as % of turnover.

was generated principally by the wholesale trade, the activities of which were stimulated by the increase in industrial production. The sales of the retail trade, by contrast, were "only" 4½% above the previous year's result.

Cost of materials...

The cost of materials (including expenditure on goods) expanded more or less in line with business activity both across the spectrum of enterprises and in the individual economic sectors. Its share of total output remained virtually unchanged in 1995 at 68 %. Since the very first study of east German annual accounts for the year 1990, this ratio has been distinctly higher than the corresponding west German percentage (62 1/2 % in 1995). This is presumably attributable to the fact that, following the restructuring of the east German economy, modern lean production strategies were implemented more quickly than in western Germany. In keeping with this, the gap between the east German and west German cost of materials ratio was particularly pronounced in the manufacturing sector, at almost 10 percentage points.

... and labour cost

The labour cost of east German enterprises amounted to around 18% of total output in 1995; that was 1 percentage point less than in western Germany. As mentioned, however, the comparison is distorted by the differences in the relative leanness of production. In relation to gross income (total output less the cost of materials and expenditure on goods), labour cost amounted to 56%, vis-à-vis 51% in the old Länder. Labour cost increased by just under 9% overall in 1995, which was significantly less than the growth of business

Profit and loss acount of east German enterprises in 1995 *

| | All | Manu- | Con- | |
|----------------------|-----------|--------------|-------------|-------------|
| | enter- | factur- | struc- | Distri- |
| Item | prises 1 | ing | tion | bution 2 |
| | DM millio | n . | | |
| Turnover | 64,152 | | 7,169 | 24,087 |
| Total output 3 | 64,911 | 33,443 | 7,103 | 24,122 |
| Interest received | 345 | 256 | 24 | 66 |
| Other income | 5,166 | 4,094 | 409 | 663 |
| Total income | 70,423 | 37,793 | 7,779 | 24,852 |
| Cost of materials 4 | 44,206 | 21,031 | 4,144 | 19,032 |
| Labour cost 5 | 11,606 | 7,029 | 2,220 | 2,357 |
| Depreciation | 4,146 | 2,821 | 439 | 887 |
| Interest paid | 1,380 | 807 | 136 | 436 |
| Taxes | 339 | 200 | 30 | 108 |
| on income and | | 200 | 50 | 100 |
| earnings 6 | 153 | 49 | 19 | 85 |
| Other cost | 9,441 | 6,445 | 881 | 2,116 |
| Total cost | 71,118 | 38,333 | 7,850 | 24,936 |
| Profit for the year | - 695 | - 540 | - 71 | - 84 |
| Memo items | | | | |
| Profit for the year | | | | |
| before taxes on | | | | |
| income 7 | - 542 | - 492 | - 52 | 1 |
| Do. before transfers | - 543 | – 491 | - 66 | 15 |
| | Change f | rom previo | ous vear in | % |
| Turnover | 12.7 | 16.9 | 2.0 | 10.7 |
| Total output 3 | 12.2 | 16.7 | - 0.6 | 10.7 |
| Interest received | 14.4 | 16.7 | 1.0 | 11.0 |
| Other income | 6.9 | 7.2 | 5.3 | 6.4 |
| Total income | 11.8 | 15.6 | - 0.3 | 10.6 |
| Cost of materials 4 | 12.7 | 16.8 | 0.5 | 11.3 |
| Labour cost 5 | 8.8 | 10.6 | 0.9 | 11.9 |
| Depreciation | - 3.6 | - 3.4 | - 4.5 | - 3.9 |
| Interest paid | 5.9 | 1.4 | 10.2 | 13.6 |
| Taxes | - 5.0 | - 4.8 | - 20.8 | 0.3 |
| on income and | | | | |
| earnings 6 | - 13.8 | - 26.0 | - 25.8 | - 0.9 |
| Other cost | 11.0 | 11.0 | 1.0 | 15.8 |
| Total cost | 10.5 | 12.4 | 0.4 | 11.1 |
| | Change f | rom previo | ous year | |
| | in DM mi | • | , | |
| Profit for the year | 698 | 855 | - 55 | - 102 |
| Memo items | | | | |
| Profit for the year | | | | |
| before taxes on | | | | |
| income 7 | 674 | 838 | - 62 | - 102 |
| Do. before transfers | 925 | 1,112 | l – 89 | – 98 |

^{*} Results of a two-year cylindered sample of 3,251 manufacturing, construction and distribution enterprises. — 1 Consolidated results. — 2 Retail trade, wholesale trade and intermediaries. — 3 Turnover plus change in stocks of own products and other capitalised production. — 4 Including expenditure on goods and services purchased. — 5 Wages, salaries, social security contributions and voluntary social security expenditure. — 6 In the case of partnerships and sole proprietorships trade earnings tax only. — 7 Taxes on income and earnings.

Deutsche Bundesbank

volume. In the 2,700 enterprises in our sample which also submitted details of their number of employees, labour cost per employee rose by 9½%; staff numbers were concurrently reduced by ½%.

The largest increase in labour cost per employee, at 12 1/2 %, was recorded by the manufacturing sector; this was very likely to happen, given the increase of 13 1/2 % in collectively negotiated wage and salary rates in 1995. The reduction in the staffing level in this sector was correspondingly sharp (-2%). Average labour cost in the construction sector, by contrast, went up by only 2 1/2 % over the year - and actually declined slightly in the larger firms with a turnover of DM 50 million or more – even though pay rates were raised in 1995 by 8%. This discrepancy is a clear indication that particularly construction firms in the new Länder often pay their employees at below the standard negotiated wage and salary level. Nevertheless, 2 % of jobs in the sector were lost. Only in distribution were new jobs created (some of them part-time), despite the marked rise in labour cost per employee.

in 1995 was 3 ½ % lower than in 1994. This was mainly due to the sharp drop in other depreciation, which contains negative value adjustments of debtors, in particular. This trend represents something of a return to

Depreciation

normal as this subitem had surged in 1994, not least presumably on account of the collapse of major construction and real estate

Altogether, the consumption of fixed capital

firms. In addition, the depreciation of tangible fixed assets (to be precise, extraordinary depreciation and special depreciation) was smaller in all three economic sectors examined, even though the depreciation procedures remained basically unchanged. In the construction industry, specifically, this was no doubt also partly a result of a massive contraction of capital formation.6 In the manufacturing sector, in which, according to the ifo survey of investment in the new Länder, nominal gross fixed asset formation in 1995 slightly exceeded the previous year's high level, the decline is primarily attributable to a baseline effect since in 1994 - as against 1993 and 1995 – concentrated use was made of the available special depreciation facilities by a small number of relatively large firms.7 If this special factor is disregarded, the depreciation of tangible fixed assets in industry increased by 4%.

ciation charges was offset, however, by a 6 % increase in interest paid. In 1995 interest paid accounted for roughly 2 % of total output

generated, compared with 1½% in western Germany. The increase in interest paid was due solely to the sharp growth of interest-bearing creditors. On the other hand, the

The boost given to earnings by lower depre-

average debit interest rate payable by firms – the price component, as it were – was a little

6 The balance sheet data of the two-year reporting sample give no indication of the trend in the sources and uses of funds, i.e. *inter alia* of capital formation. According to the ifo survey of construction investment in the new Länder, nominal gross fixed asset formation in the construction industry fell by almost one-third in 1995.

Interest paid

⁷ The special depreciation facilities amounting to 50 % of the purchase price available in eastern Germany (up to the end of 1996) could (and still can) be distributed freely over the first five years. However, the rapid exhaustion of this facility is an attractive option only for firms which have reached an adequate profit level or whose parent enterprises in western Germany can offset the loss of the subsidiary against their own tax bill.

lower in 1995 than in the previous year. Since, at the same time, the stock of interest-bearing debtors expanded substantially (so that interest received tended to rise, despite the likewise falling creditor interest rates), net interest paid increased by a smaller margin. Not surprisingly, loss-making enterprises bore the heaviest debt burden. In the bottom quartile, gross interest paid, on average accross the entire sample, amounted to over 3 % of turnover, compared with somewhat more than 1½ % in the top quartile; in the manufacturing sector the spread between the top and bottom quartiles ranged from almost 4 % to 2 %.

Balance sheet trends and structures

Balance sheet total

At 9 ½ %, the balance sheet total of the firms analysed expanded in 1995 largely in line with business volume. This overall figure conceals contrasts, similar to those recorded in the analysis of earnings, between manufacturing – which increased its assets and liabilities by $12 \frac{1}{2}$ % – and the construction sector, in which the balance sheet total stagnated. Distribution lay between the other two, with a rate of expansion of 7 %.

Asset structure

The asset-side structure of east German enterprises continues to differ considerably from that in western Germany. The financial resources, which – following reunification – were very limited anyway in relation to the huge restructuring requirements, were used primarily in order to build up a modern capital stock. That left little scope for accumulating a "financial superstructure", that is debtors, in-

vestments and participating interests. In assessing the low level of participating interests it should also be borne in mind that many east German firms are themselves subsidiaries of west German or foreign enterprises and that, consequently, the acquisition of participating interests is in many cases probably not a primary strategic corporate objective. Total fixed assets (tangible fixed assets plus stocks) declined a little to just under 60 % of the balance sheet total, compared with 45 % in western Germany. This was mirrored by the corresponding differences in respect of financial assets.

At 7%, tangible fixed assets grew more

slowly in 1995 than total assets. This was

caused mainly by the comparatively weak level of investment in construction and distribution mentioned above, which in turn is related to the investment boom which followed reunification and the resultant excess capacity that was created in some areas. In the manufacturing sector, by contrast, all types of tangible fixed assets registered strong growth, including the subitem "land and buildings" (which cannot be broken down further), which had previously dis-

and the markedly higher level of investment in new buildings seems to have gained the upper hand.

played a pronounced declining tendency, partly because real estate that was no longer

needed was sold or was hived off in the wake

of privatisation. This adjustment process has

apparently come to an end in the meantime,

Another point to note is that the valueadjusted stock of tangible fixed assets Total fixed assets and financial assets

Balance sheet data of east German enterprises in 1995 *

| Item | All enter- prises 1 | Manu- factur- ing | Con- struc- tion | Distri- bu- tion 2 |
|--------------------------------|---------------------------|-------------------------|------------------------|--------------------------|
| | DM milli | | | |
| Assets | | 011 | | |
| Tangible fixed assets 3 | 20,375 | 15,126 | 1,417 | 3,831 |
| Stocks | 8,968 | 4,682 | 840 | 3,446 |
| Cash 4 | 4,660 | 3,849 | 401 | 411 |
| Debtors | 14,458 | 8,239 | 2,844 | 3,375 |
| Short-term of which | 14,033 | 7,923 | 2,808 | 3,302 |
| Trade debtors | 6,275 | 3,053 | 1,020 | 2,201 |
| Long-term | 425 | 316 | 37 | 73 |
| Investments | 165 | 143 | 15 | 8 |
| Participating interests | 1,236 | 1,107 | 28 | 101 |
| Prepayments and | ' | | | |
| accrued income | 302 | 171 | 65 | 65 |
| Liabilities | | | | |
| Own funds 5, 6 | 12,023 | 9,803 | 424 | 1,797 |
| Creditors | 32,851 | 19,384 | 4,671 | 8,796 |
| Short-term | 21,482 | 11,378 | 3,820 | 6,285 |
| Long-term | 11,369 | 8,006 | 852 | 2,511 |
| Provisions 6 | 5,256 | 4,106 | 514 | 636 |
| Accruals and deferred | | | | |
| income | 34 | 25 | 1 | 8 |
| Balance sheet total 5 | 50,165 | 33,317 | 5,611 | 11,237 |
| | Change : | from prev | ious year | in % |
| Assets Tangible fixed assets 3 | 7.1 | 8.1 | 5.5 | 3.7 |
| Stocks | 11.4 | 18.4 | 7.7 | 8.2 |
| Cash 4 | 20.1 | 28.8 | - 10.9 | - 7.2 |
| Debtors | 8.1 | 9.0 | 1.9 | 11.4 |
| Short-term | 8.2 | 9.3 | 1.6 | 11.5 |
| of which | 0.2 |] 3.5 | 1.0 | 11.5 |
| Trade debtors | 3.6 | 6.2 | - 9.2 | 6.9 |
| Long-term | 4.8 | 2.0 | 29.2 | 7.7 |
| Investments | 10.2 | 9.3 | 48.2 | – 18.8 |
| Participating interests | 20.7 | 22.8 | - 22.1 | 16.7 |
| Prepayments and | | | | 10.7 |
| accrued income | 33.9 | 48.4 | - 3.1 | 53.4 |
| Liabilities | | | | |
| Own funds 5, 6 | 17.5 | 23.8 | l – 5.1 | l – 3.9 |
| Creditors | 9.8 | 12.4 | 0.7 | 9.5 |
| Short-term | 3.9 | 3.5 | - 2.5 | 9.0 |
| Long-term | 23.1 | 28.2 | 18.3 | 10.7 |
| Provisions 6 | - 4.9 | - 7.4 | - 1.2 | 10.5 |
| Accruals and deferred | | | | |
| income | - 32.9 | - 39.1 | - 11.8 | - 8.1 |
| | | | | |

^{*} Results of a two-year cylindered sample of 3,251 manufacturing, construction and distribution enterprises. — 1 Consolidated results. — 2 Retail trade, wholesale trade and intermediaries. — 3 Including intangible assets. — 4 Notes and coins and bank balances. — 5 Less adjustments to capital accounts. — 6 Including pro rata share of special reserves.

Deutsche Bundesbank

reported in the balance sheet no doubt significantly understates the actual capital stock available on account of the extensive depreciation in the past years. Fixed asset formation was also fuelled by the fact that the growth of raw materials and consumables, on the one hand, and of work in progress, on the other, kept pace with the expansion of business activity. The various financial asset items mostly grew sharply in 1995, some at double-digit rates. The substantial increase in financial links between affiliated enterprises played a special role in this.

In the aggregate, the firms analysed were

able to further extend their liable capital base

in 1995. The amount of own funds rose by 17 1/2 % in the course of the year; their percentage of the balance sheet total improved by 1½ percentage points to 24%. This means that these east German enterprises had a far more favourable capital base than producing enterprises in western Germany, which had an own funds ratio of 18%. Two qualifications need to be mentioned, however. On the one hand, the counterparts on the right-hand side of the balance sheet to the weak "financial superstructure" items on the left-hand side of the balance sheet likewise still have a small volume, particularly provisions. On the other hand, the promotional credits granted to east German firms on a major scale often have capital-like properties, even if they are treated as long-term creditors for accounting purposes. In a longer-term comparison, the own funds ratio improved by 10 percentage

points between its low point in 1993 and

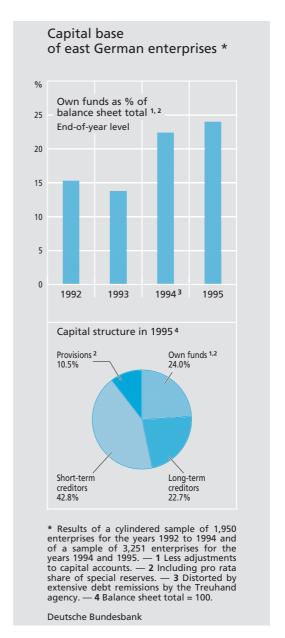
1995, displaying a particular surge from 1993

to 1994. The latter was related to the debt

Provision with own funds in general, ...

remission granted by the Treuhand agency to several sizeable enterprises, as mentioned earlier; in 1995 such radical restructuring measures played a much smaller role.

... in manufacturing... This average view masks very disparate trends in the individual sectors, however. Thus 29 1/2 % of the balance sheet total of manufacturing firms was covered by capital on average in 1995, compared with 26 1/2 % in the previous year. The breakdown into quartiles shows that industrial enterprises in the bottom quartile, in particular, were able to ease their balance sheet overindebtedness noticeably. Whereas in 1994 the sum of creditors and provisions had exceeded the stock of valuable assets by 37 1/2 %, this gap narrowed to 28 1/2 % in 1995. But that still leaves open the question of how such enterprises can carry on in business at all. When interpreting the own funds ratios given here, it should be borne in mind that the data on assets and liable funds are revised downwards substantially by the Bundesbank in many cases in the course of its balance sheet analysis.8 An additional consideration is that guarantees provided by government agencies or by financially strong parent enterprises in many cases likewise relativise the significance of the "undercapitalisation" recorded in the balance sheet. The manufacturing firms in the two middle quartiles managed to improve their capital base slightly, while those in the top quarter were able to maintain their exceptionally good own funds ratio of around 51% which they had already achieved in 1994.



In contrast to the manufacturing firms included in the study, the construction and distribution enterprises saw their capital base

... and in construction and distribution

8 As a general principle, subscribed capital unpaid, own shares held, loans to partners etc. are systematically subtracted from the own funds figures reported by east and west German enterprises alike. In addition, the annual accounts of east German firms are stripped of the quite comprehensive accounting conveniences granted under the Deutsche Mark Balance Sheet Act purely for balance sheet adjustment purposes, so that these corrections by the Bundesbank have a major impact in this case.

contract further on average, not least because of their deteriorating earnings position; the ratio of own funds to the balance sheet total of the firms in those two sectors decreased to $7\frac{1}{2}$ % and 16%, respectively, and moved closer to west German levels as a result. This particularly affected the already weak enterprises in the lowest quartile, whose capital gap widened to $-13\frac{1}{2}$ % in construction and to $-5\frac{1}{2}$ % in distribution. The own funds ratios of the firms in the top quarter, by contrast, were fairly stable, at 23% and $39\frac{1}{2}$ %, respectively.

Dispersion by size category and...

The dispersion of this ratio by size category shows a broad spread between small and large enterprises which actually widened further between 1994 and 1995. In the year under review firms with a turnover of less than DM 5 million had an average own funds ratio of just under 9%, compared with 32 1/2 % for enterprises with a turnover of at least DM 50 million; the ratio in the mediumsize category was 14 1/2 %. This differential is not peculiar to east German enterprises, however, but can be observed in western Germany, too. The provision with own funds of west German firms with larger turnovers is not quite as high as that in the new Länder, though.

... its causes

The main reason for the size-related differences is, on the one hand, that small firms – in eastern Germany and western Germany alike – apparently find it harder to accumulate capital than do larger firms. On the other hand, a role is played by various factors relating to the structure and legal form of the enterprises as a result of which the

Own funds ratio by quartile *

%

| O +! - (-) | All enter- | | Con- | Distri- | | |
|---|--|--|--|--|--|--|
| Quartile(s) | prises | facturing | struction | bution | | |
| Lowest | | | | | | |
| 1994 | - 22.2 | - 37.4 | - 10.7 | - 4. | | |
| 1995 | - 18.6 | - 28.7 | - 13.7 | - 5. | | |
| 25 % to less than 50 % | | | | | | |
| 1994 | 4.3 | 5.0 | 2.1 | 4. | | |
| 1995 | 4.0 | 6.0 | 2.0 | 3. | | |
| 1555 | 4.0 | 0.0 | 2.0 | , | | |
| 50 % to less than 75 % | | | | | | |
| 1994 | 12.9 | 17.6 | 7.6 | 11. | | |
| 1995 | 12.6 | 18.9 | 7.5 | 11. | | |
| Highest | | | | | | |
| 1994 | 44.5 | 51.3 | 22.5 | 39. | | |
| 1995 | 44.5 | 51.1 | 22.9 | 39. | | |
| All | | | | | | |
| 1994 | 22.4 | 26.7 | 8.0 | 17. | | |
| 1995 | 24.0 | 29.4 | 7.5 | 16. | | |
| | | Enterprises with a | | | | |
| | | turnover of | | | | |
| | | | DM 5 | | | |
| | | | million | | | |
| | | less | to less | DM | | |
| | All | than | than | 50 mil- | | |
| | All enter- prises | DM 5 million | DM 50 | lion or | | |
| | | million | lmillion | more | | |
| | p | million | million | more | | |
| Lowest | | million | million | more | | |
| Lowest 1994 | - 22.2 | - 27.3 | million – 15.8 | | | |
| | | | | - 13. | | |
| 1994 1995 | - 22.2 | - 27.3 | - 15.8 | - 13. | | |
| 1994 1995 | - 22.2 | - 27.3 | - 15.8 | - 13. - 12. | | |
| 1994 1995 25 % to less than 50 % | - 22.2 - 18.6 | - 27.3 - 23.2 | - 15.8 - 12.0 | - 13. - 12. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 | - 22.2 - 18.6 | - 27.3 - 23.2 | - 15.8 - 12.0 | - 13. - 12. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % | - 22.2 - 18.6 4.3 4.0 | - 27.3 - 23.2 2.2 1.6 | - 15.8 - 12.0 5.0 4.8 | - 13. - 12. 12. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 | - 22.2 - 18.6 | - 27.3 - 23.2 | - 15.8 - 12.0 | - 13. - 12. 12. 13. | | |
| 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % 1994 1995 | - 22.2 - 18.6 4.3 4.0 | - 27.3 - 23.2 2.2 1.6 | - 15.8 - 12.0 5.0 4.8 | - 13. - 12. 12. 13. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % 1994 1995 Highest | - 22.2 - 18.6 4.3 4.0 12.9 12.6 | - 27.3 - 23.2 2.2 1.6 9.5 9.1 | - 15.8 - 12.0 5.0 4.8 12.1 12.4 | - 13. - 12. 12. 13. 24. 26. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % 1994 1995 Highest 1994 | - 22.2 - 18.6 4.3 4.0 12.9 12.6 | - 27.3 - 23.2 2.2 1.6 9.5 9.1 | - 15.8 - 12.0 5.0 4.8 12.1 12.4 | - 13. - 12. 12. 13. 24. 26. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % 1994 1995 Highest 1994 1995 | - 22.2 - 18.6 4.3 4.0 12.9 12.6 | - 27.3 - 23.2 2.2 1.6 9.5 9.1 | - 15.8 - 12.0 5.0 4.8 12.1 12.4 | 13 12. 13 12. 13 24. 26. 59. 55. | | |
| 1994 1995 25 % to less than 50 % 1994 1995 50 % to less than 75 % 1994 1995 Highest 1994 | - 22.2 - 18.6 4.3 4.0 12.9 12.6 | - 27.3 - 23.2 2.2 1.6 9.5 9.1 | - 15.8 - 12.0 5.0 4.8 12.1 12.4 | - 13. - 12. 12. 13. 24. 26. | | |

^{*} Average values per quartile. To determine the quartile categories enterprises were sorted separately by own funds ratio for each year per sector and per size category. The own funds ratio is the own funds as % of the balance sheet total (less adjustments to capital accounts).

Deutsche Bundesbank

undoubted shortage of capital in many east German enterprises may appear greater than it is in reality. Past experience shows, for example, that small firms produce on the basis of a relatively low level of capital intensity. Hence they require fewer tangible fixed assets and fewer own funds in relation to their value added.

Moreover, the group of sole proprietors and partnerships, which are predominant in the smallest size category, generally have smaller own funds ratios than, for instance, public limited companies, which are more heavily represented in the larger turnover categories. The main reason for this is that unincorporated enterprises are largely free to decide themselves whether certain assets and interest-bearing creditors are to be allocated to their private or business accounts. But since the allocation of financial assets to the private sphere, on the one hand, and of bank loans to the business sphere, on the other, is sometimes associated with substantial tax benefits, it is safe to assume that the actual financial reserves are larger than the amount which appears in the balance sheet. The dispersion across the individual quartiles in the various size categories should also be seen in this context. Many of the small firms in the bottom quartile, whose creditors and provisions exceeded their valuable assets by 23 % in 1995, would not have been creditworthy and hence could not survive in the longer run if loan collateral were not available in their private sphere.

The structure of the liabilities side of the balance sheet of east German firms included in

the study is characterised not only by the aforementioned differences in the provision with own funds but also by the fact that the level of provisions, at 10 1/2 % of the balance sheet total in 1995, was not even half as high as the corresponding proportion in western Germany. In particular, provisions for pensions (which, with respect to their financing function, are akin to capital resources, even though by nature they are to be regarded as debt) amounted to a negligible ½%, compared with 9 % in the old Länder. Hence bank loans were particularly important for east German enterprises – to the extent that this "gap" was not plugged by their comparatively better capital base.

All in all, the east German firms analysed in the study were able on average to improve both their profitability and their financing in the more difficult environment which prevailed in 1995. But this improvement was confined to the manufacturing sector, whereas construction and distribution firms did not manage to maintain the relatively favourable position which they had reached immediately after German unification. The close link between profitability and the provision with own funds apparent in the cross-sectoral comparison and the dispersion analysis presented here clearly shows that the path to attaining greater corporate viability, given the prevailing conditions of the German financial system, lies primarily in substantially raising the still inadequate level of profitability. That requires both more intense efforts in respect of product development and marketing and greater attention to the viability of east German enterprises in respect of their cost burden.

Greater corporate viability required

Provisions and bank loans